

Chapter 1

Reconnaissance and Security Helicopter Fundamentals

SECTION I—PRIMARY ROLES AND MISSIONS

ESSENTIAL CHARACTERISTICS OF ARMY OPERATIONS

1-1. Army aviation's rapid, terrain-independent air mobility helps create tactical opportunities for commanders at all echelons. These opportunities allow commanders to operate inside the enemy's decision cycle and force the enemy to make decisions that will disrupt its initial plan. The air cavalry provides crucial information by performing reconnaissance and security operations. By effectively using air cavalry, the maneuver commander takes the initiative away from the enemy and conducts combat operations on his own terms. By knowing and integrating the essential characteristics of Army operations, air cavalry can enhance the commander's ability to capitalize on enemy vulnerabilities. These essential characteristics are agility, initiative, depth, orchestration, and versatility.

AGILITY

1-2. Air cavalry greatly enhances the ACR, division, and corps agility because of the outstanding mobility it brings to the battlefield. Agility is the ability of friendly forces to act faster than the enemy. It is the first prerequisite for seizing and holding the initiative. Agility requires flexible organizations and quick-minded, flexible leaders. They must know of critical actions as they occur and act to avoid enemy strengths and attack enemy vulnerabilities. They must do this repeatedly so that every time the enemy begins to counter one action another immediately upsets its plan. This leads to ineffective, uncoordinated, limited enemy responses and to the enemy's eventual defeat. To be effectively agile, leaders must continuously "read the battlefield." They must use the information provided by the air troops as well as other intelligence-gathering efforts, decide on a COA quickly, and act without hesitation.

INITIATIVE

1-3. The aggressive actions of the air cavalry allow the ACR, division, or corps commander to select the time and place of his attack. Through the effective use of FS, CAS, and AHs, the air cavalry assist in taking the initiative. The underlying purpose of every encounter with the enemy is to seize or to retain independence of action. To do this, the commander must reach decisions and execute actions faster than the enemy. These actions include accurate and timely reporting and possibly delivering the initial shock to the enemy.

DEPTH

1-4. Depth refers to time, distance, and resources available to the commander for the mission. Air cavalry is highly mobile, flexible and possesses the capability to report enemy intelligence throughout the depth of the commanders battlespace. This allows commanders to employ friendly forces to counter any enemy combat operation. Momentum in the attack and elasticity in the defense are derived from depth. Knowing the time required to move forces is essential in knowing how to deploy to destroy, disrupt, or delay the enemy. Commanders need adequate space for force disposition, maneuver, dispersion, and must see the whole battlefield. As the range and precision of weapon systems increase, commanders will need to expand their ability to maintain situational awareness throughout the battlespace. The mobility and sensors of the air cavalry provide the commander with the ability to detect the enemy and manipulate the battlefield. The air cavalry provide the reconnaissance, surveillance, and security capabilities to achieve these requirements.

ORCHESTRATION

1-5. Orchestration means to arrange, develop, organize, or combine to achieve a desired or maximum effect. The commander achieves this maximization through an adequate and timely knowledge of both enemy and friendly forces. Orchestration describes the means by which commanders apply the complementary and reinforcing effects of all military and nonmilitary assets to overwhelm opponents at one or more decisive points. Air cavalry provides the commander with invaluable information to visualize the battlefield and to orchestrate his forces successfully. Effective orchestration requires anticipation, agility, mastery of time-space relationships, and a complete understanding of how friendly and enemy capabilities interact. Air cavalry elements must effectively integrate into the brigade, regiment, division, or corps commander's scheme of maneuver to achieve forceful and rapid operations. Air cavalry commanders, like their superiors, must make specific provisions in advance to exploit the opportunities that tactical success creates.

VERSATILITY

1-6. Versatility is the pivot point from which the cavalry commander will accomplish the other tenets. Versatility is the ability of units to conduct different kinds of operations either sequentially or simultaneously and is synonymous with flexibility. It allows for a smooth transition between varying mission combinations and deploying from one area or region to another without degrading performance. Versatility requires competence in a variety of skills. The commander that plans and executes his missions from this perspective will be guaranteed success on the battlefield and in the units ability to react smoothly and accurately to changing mission requirements.

SQUADRON MISSION

1-7. The primary mission of the RAS, DCS (heavy, light, and airborne), and ACS is to conduct reconnaissance and security operations. When appropriately task organized, the unit may participate in other security

missions. The air cavalry performs air combat as part of the counter-reconnaissance effort, or to protect the overall force or organic units by providing local security. The air cavalry assists in C³I enhancement; in addition to reconnaissance and security. Through these missions, they provide timely intelligence concerning the enemy, terrain, and weather throughout the AO and early warning against enemy observation or attack. Today's cavalry regiments and squadrons must be able to conduct operations across a wide range (peace, conflict, and war) against threats ranging in size from major regional powers, lesser powers, and terrorist groups to insurgents. Cavalry regiments and squadrons may be among the first units to initially deploy into an area to conduct stability operations, support operations or operations as part of the postconflict phase of some other contingency operation.

TROOP MISSION

1-8. The primary mission of the air troop is to conduct reconnaissance and screening operations. The air troop extends the aerial reconnaissance and screening capabilities of their squadron and supports the squadron's economy of force role during offensive, defensive, rear, and retrograde operations. Through these missions they provide timely combat information concerning the enemy, terrain, and weather throughout the AO and early warning against enemy observation or attack. Air troops augment ground forces when conducting guard and cover operations. Other missions that the air troop normally performs are C³I enhancement, surveillance, counter-reconnaissance, raids, deception, air assault security, convoy security, nuclear aerial and/or nuclear and chemical ground surveys, and assisting in ground unit passage of lines. Air cavalry may be transferred under the OPCON to other forces for specific missions or as part of a JTF.

CAPABILITIES AND LIMITATIONS

1-9. The air cavalry possesses strengths and limitations that must be clearly understood for their effects to be maximized (see Table 1-1).

Table 1-1. Air Cavalry Capabilities and Limitations

	RAS, DCS, and ACS	ACT
Capabilities	Provide combat information. Enhance C ³ I. Provide security. Quick reaction over wide area. Rapid transport of tactical forces. - ACR has organic assault helicopter troop. - DCS and ACS must request lift assets. Lines of communication surveillance. Provide target acquisition. Provide limited air assault (RAS only). Conduct aerial resupply (RAS only).	High degree of maneuverability. Demonstrated flexibility in changing battlefield situations. Adds depth in all reconnaissance and security missions.
Limitations	Limited operation in adverse weather or zero visibility conditions. Limited R&S capability at night (OH58A/C and AH-1 only). Limited operation in NBC environment. Limited AA security against level I threat. Little to no AA security against level II threat.	Limited, continuous 24 hour-a-day operations. Limited station time due to refueling requirements results in frequent situation updates as aircraft rotate in and out of the AO.

SECTION II—ORGANIZATIONS

CAVALRY ORGANIZATIONS

1-10. The organization of air cavalry will be reviewed under the following headings:

- RAS of the ACR and ACR/L.
- Armored or heavy DCS
- Light infantry and/or airborne DCS.
- ACS.
- Cavalry troops within a cavalry organization—HHT, ACT, ATKHT (RAS only), AHT (RAS only), and AVUM troop.

REGIMENTAL AVIATION SQUADRON

1-11. The RAS provides the ACR with combat aviation assets. The armored RAS is organized with a headquarters troop, three ACTs, two ATKHTs, an AHT, and an AVUM troop (Figure 1-1). The light RAS is organized with a headquarters troop, four ACTs, an AHT, and an AVUM troop (Figure 1-2). The squadron adds a very responsive, terrain-independent combat power to the regiment. The maneuverability and flexibility of the RAS enhances the flexibility of the regiment. The RAS may operate independently of or in close coordination with the ACS, or it may provide troops to the ACS. The RAS can also expect ground elements for specific missions. When integrated with the regimental artillery the RAS provides the commander with a tremendously flexible capability to shape the battlespace and set the conditions for the regiment's ground maneuver operations.

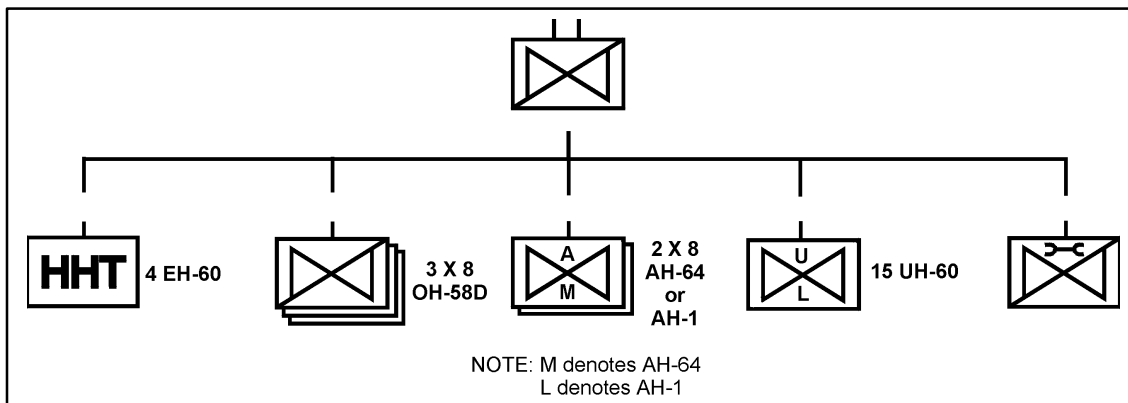


Figure 1-1. Armored RAS

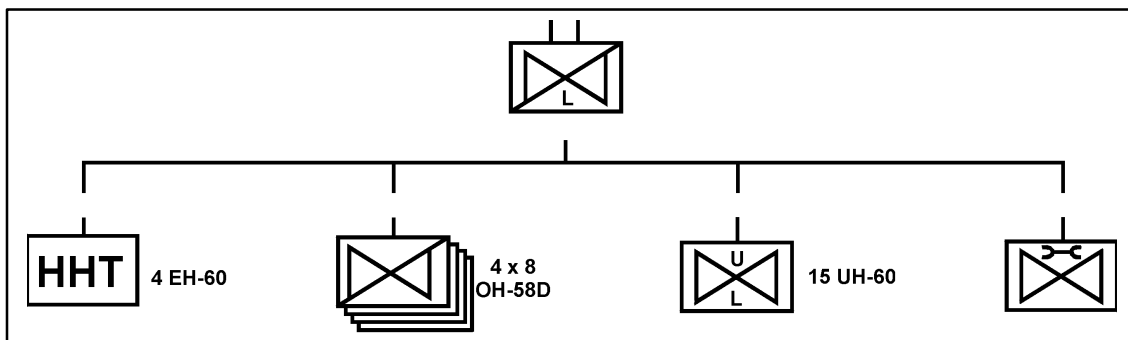


Figure 1-2. Light RAS

DIVISION CAVALRY SQUADRON

1-12. The DCS provides the division with reconnaissance, surveillance, and security assets. The armored DCS is organized with a headquarters troop, two ACTs, three GCTs (M1 and M3 equipped), and an aviation service troop (includes Class III and/or Class V and AVUM support) (Figure 1-3). The light infantry DCS is organized with a headquarters troop, two ACTs, one GCT (HMMWV equipped), and an AVUM troop (Class III and/or Class V consolidated in aviation brigade HHC) (Figure 1-4). The airborne DCS is organized with a headquarters troop, three ACTs, one ground troop (HMMWV equipped), and an AVUM troop (Figure 1-5).

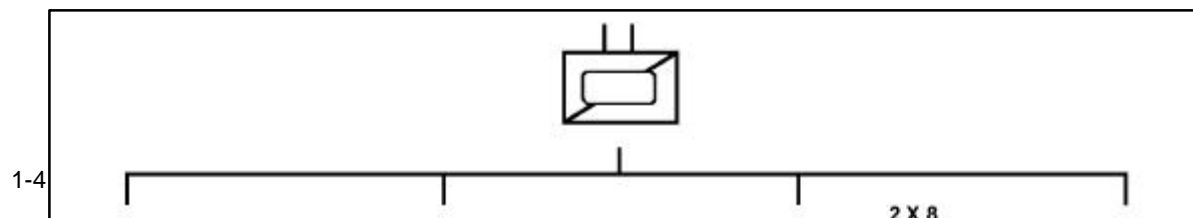


Figure 1-3. Armored Division Cavalry Squadron

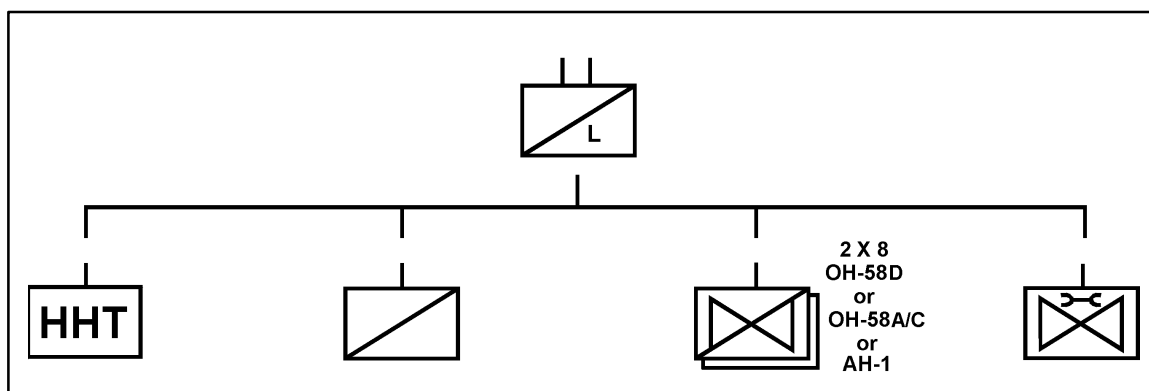


Figure 1-4. Light Infantry Division Cavalry Squadron

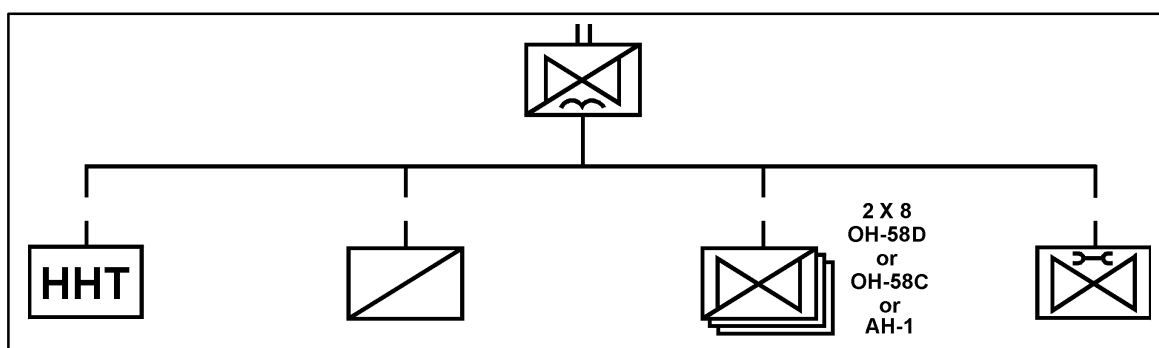


Figure 1-5. Airborne Division Cavalry Squadron

AIR CAVALRY SQUADRON

1-13. The ACS is an extremely responsive and rapidly deployable force that is part of the air assault division. The ACS is equipped with a headquarters troop, four ACTs, and an AVUM troop (Figure 1-6). The squadron is structured light to possess the same strategic mobility as the parent division. When deployed, the squadron possesses a significant mobility advantage over the light infantry battalions of the division.

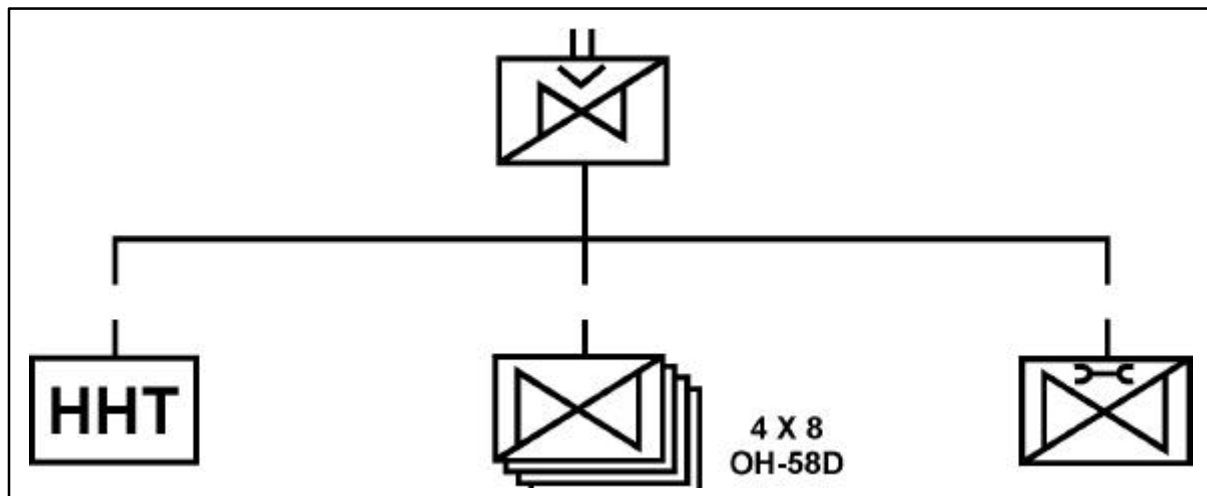


Figure 1-6. Air Cavalry Squadron

TROOP ORGANIZATION

HEADQUARTERS AND HEADQUARTERS TROOP

1-14. The HHT provides C² and staff planning for the squadron. The squadron headquarters consists of the commander and his coordinating and/or personal staff. The headquarters troop consists of a headquarters, a supply section, a vehicle maintenance section, a food service section, a medical treatment squad, a Class III and/or Class V platoon (in the RAS), a unit ministry team, and a communications section. In the RAS, a separate CEWI flight platoon provides the ACR with its aerial signal intelligence asset. In the division cavalry, combat electronic warfare and intelligence support is available upon request.

AIR CAVALRY TROOP

1-15. The troop headquarters consists of the commander, the first sergeant, the safety officer, and a vehicle driver (crew chief from one of the aeroscout platoons). The troop commander is overall responsible for the command, control, employment, and maintenance of the ACT. He is assigned an aircraft from one of the aeroscout platoons. The first sergeant coordinates external support such as supply, mess, personnel, medical, and vehicle

maintenance. The first sergeant also monitors combat operations. He supervises virtually all operations in the AA. The vehicles assigned to the ACT will vary from unit to unit and are split between the headquarters section and the platoons based on the situation.

1-16. Each platoon consists of four aircraft. Each platoon is led by a lieutenant and includes a flight examiner, an instructor pilot, pilots, platoon sergeant, and crew chiefs.

ATTACK HELICOPTER TROOP (ARMORED RAS ONLY)

1-17. Each ATKHT consists of a troop headquarters, an aeroscout platoon with three AH-64s, and an attack platoon with five AH-64s. The ATKHTs are the primary antiarmor forces of the RAS. They can fix and prevent enemy penetrations, exploit success, and provide long-range direct antiarmor fires. They can also perform reconnaissance and screening missions. ATKHTs are employed the same as the attack helicopter companies discussed in FM 1-112.

ASSAULT HELICOPTER TROOP (RAS ONLY)

1-18. The AHT consists of a troop headquarters and three assault platoons. Each platoon has five UH-60s, totaling fifteen aircraft per troop.

1-19. The AHT provides the ACR and the RAS with CS and CSS by moving troops, supplies, and equipment within the combat zone. It may conduct air assault operations for up to one dismounted mechanized infantry company, conduct LRSD insertions, or augment aeromedical evacuation efforts. In addition, the AHT provides UH-60 aircraft for command, control, and liaison as required by the ACR commander. It also allows the ACR and RAS commanders to support their own extensive Class III, Class V, and maintenance requirements. The AHT is employed the same as the assault helicopter companies discussed in FM 1-113.

AVIATION UNIT MAINTENANCE TROOP

1-20. The AVUM troop consists of a troop headquarters, a quality assurance section, an aircraft maintenance platoon, an aircraft component repair platoon, and a Class III and/or Class V platoon. The AVUM troop provides AVUM support for organic squadron aircraft. In the armored DCS, the AVUM provides Class III and/or Class V support.

AIR CAVALRY PLATOON

1-21. The commander organizes platoons to train and fight as a unit under the direction of the platoon leader.

AIR CAVALRY TEAM

1-22. The ACTM is the basic building block of any troop mission and is the "eyes and ears" of the commander. ACTMs can cover wide frontages and add depth to the battle area. ACTMs can also rapidly report information about the tactical situation to provide real time intelligence to the commander. The commander task organizes the troop into ACTMs based on table of organization and equipment, aircraft availability, and METT-T. The ACTM

can be any combination of two or more aircraft (OH-58A/C, OH-58D, AH-64A, AH-64D, or AH-1) assigned a mission.